



DUKE STREET *IN MOTION*

**Transitway Advisory
Group Meeting #1**

April 28, 2022

alexandriava.gov/DukeInMotion

\$87M in Northern Virginia Transportation Authority regional revenues are being utilized towards this Duke Street Transitway project.



WELCOME

Hillary Orr

Deputy Director,
Transportation and
Environmental Services



AGENDA

- Introductions / Roles and Responsibilities / Ground Rules
- Project history
- Related City projects and initiatives
- Project Approach
- Community Engagement Summary
- Vision and Guiding Principles
 - POSSIBLE ACTION ITEM: V-GP Adoption
- Project approach introduction
- Schedule and next meetings
- Public Comment



GOALS OF TONIGHT'S MEETING

- Get to know your fellow Advisory Group Members
- Understanding of the project history and next steps
- Review and possible adoption of the project Vision and Guiding Principles
- Scheduling and main agenda items for future Advisory Group meetings



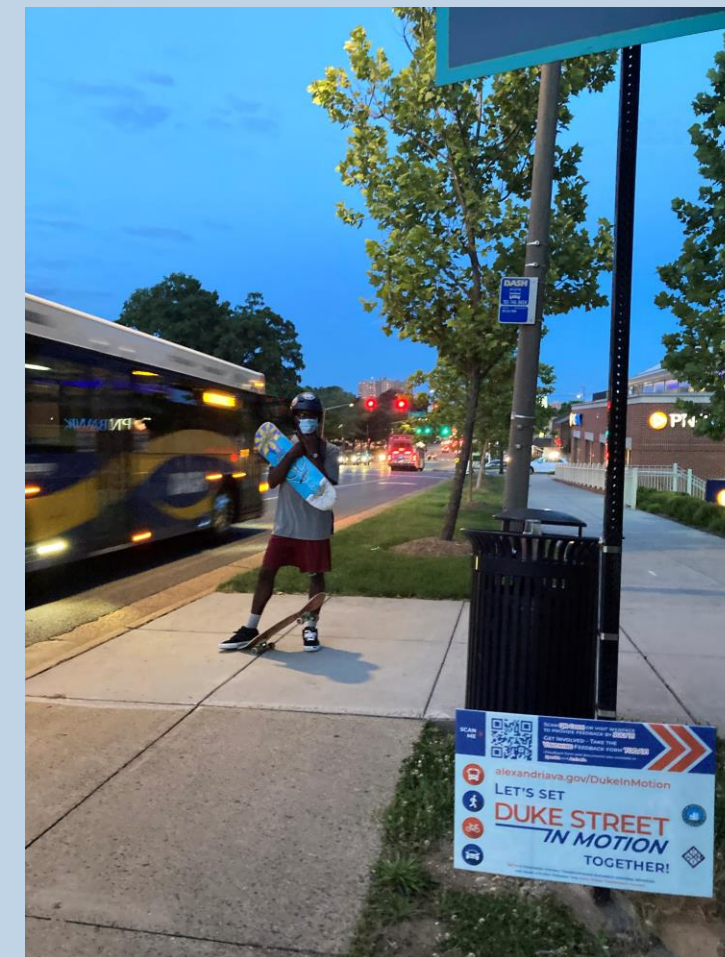
ROLES, RESPONSIBILITIES, AND GROUND RULES

Roles and Responsibilities

RELAY INFORMATION: Provide information to your groups and neighborhoods for feedback

PARTICIPATE: We encourage all members to be active participants in the discussions and participate in community engagement activities

PROVIDE FEEDBACK: Bring forward opinions and experiences of the groups you represent



Other Logistics

Freedom of Information Act

Hybrid Meetings

- Attendance requirements
- Quorum requirements

Selection of Chair

- Assists staff in development of meeting agendas
- Moderate meetings
 - Keep meeting on schedule
 - Ensure ground rules are followed



Ground Rules

SCHEDULES: We will respect everyone's busy schedules, starting the meeting promptly at the scheduled time and ending on-time.

RESPECT:

- Please listen and express opinions, disagreements, or concerns with respect.
- Do not interrupt someone else when they are speaking.
- Please keep comments/questions short so everyone has time to participate.

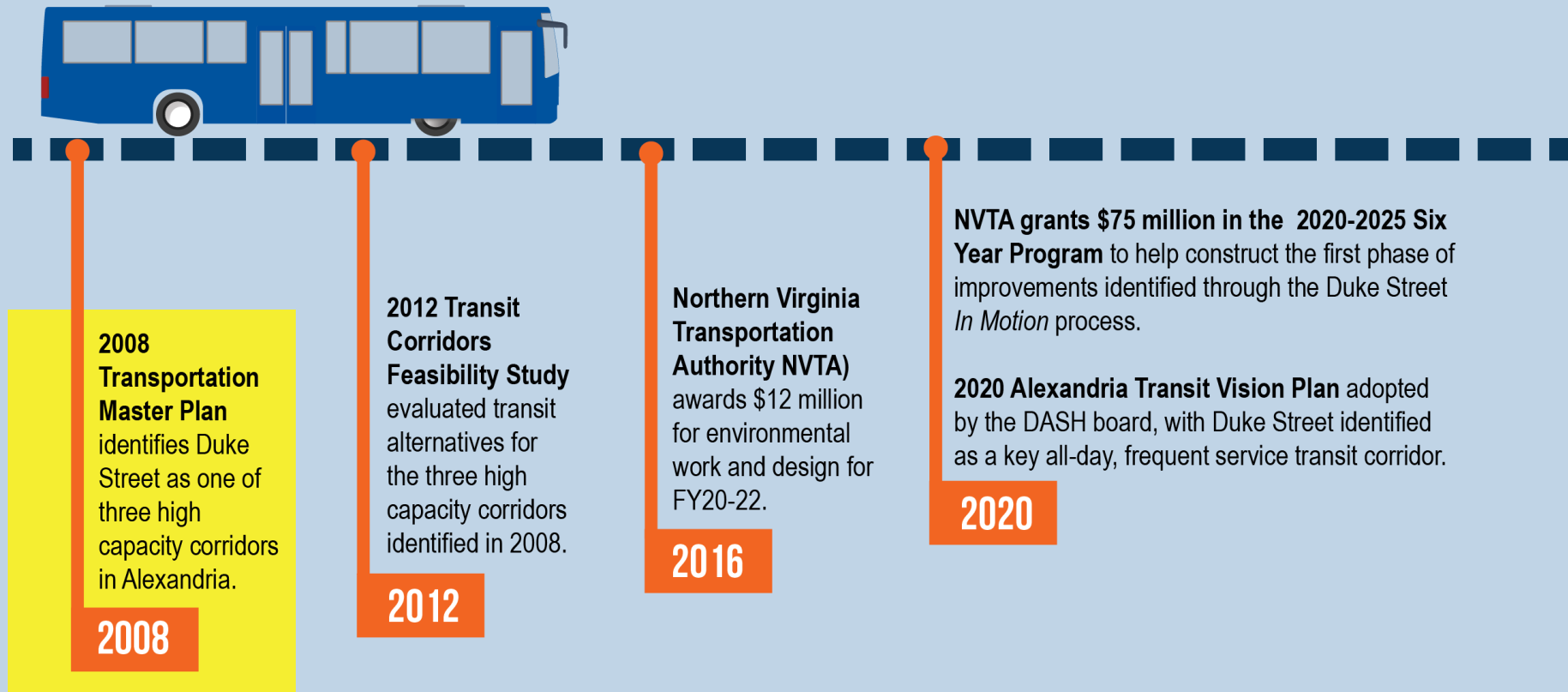
GROUP REPRESENTATION: For members representing groups, please share the opinions of the group, and note when opinions are personal.

BUILD ON DECISIONS: Once decisions have been made, productively build on them.



BACKGROUND

HOW DID WE GET HERE AND HOW ARE WE SETTING **DUKE STREET** ? *IN MOTION*

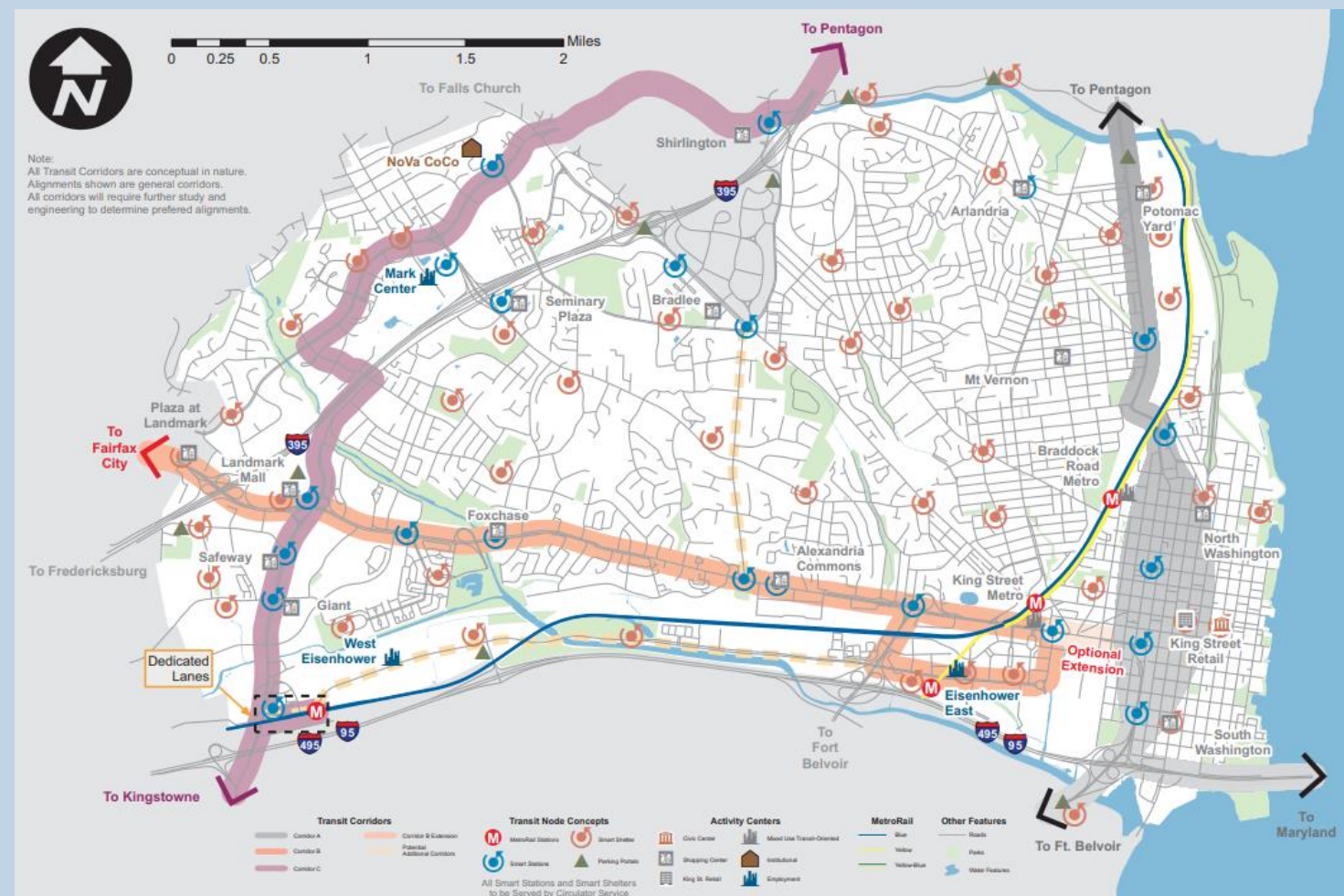


Previously Approved Planning Efforts

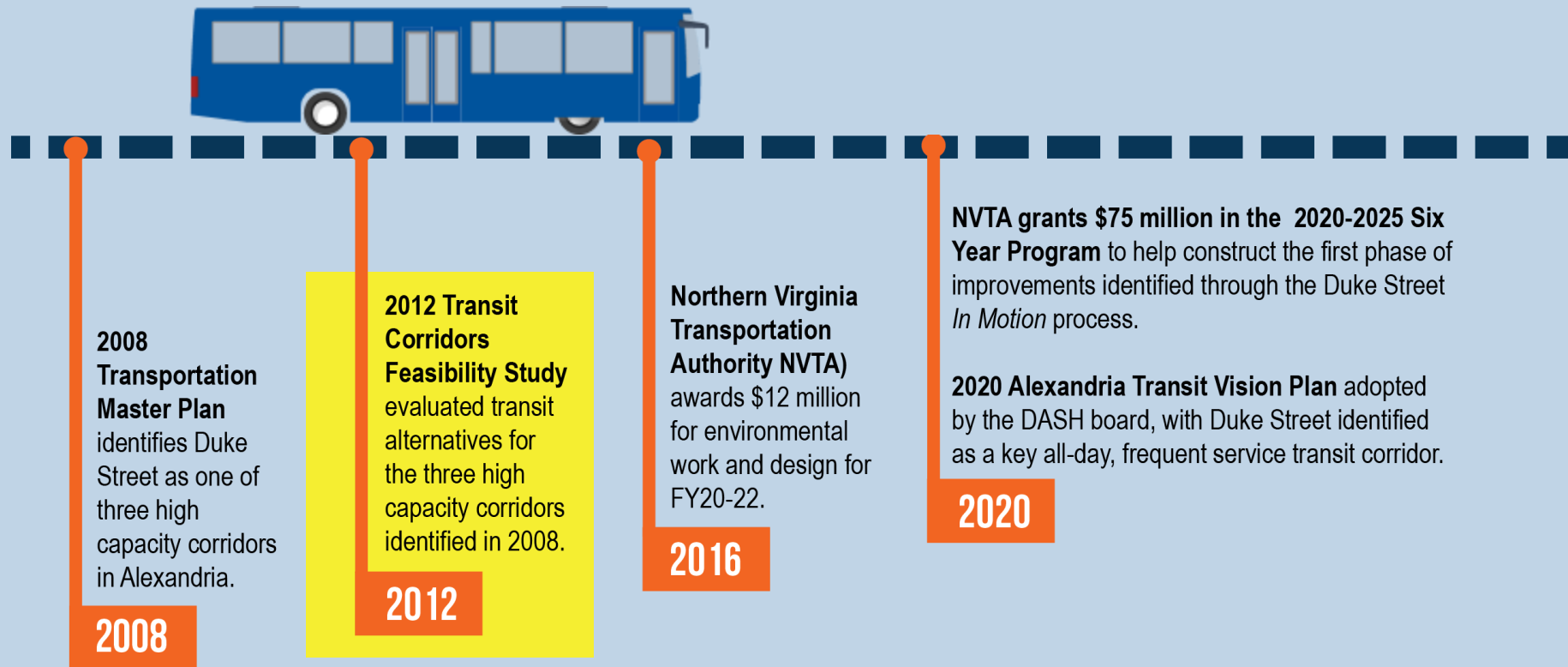
2008 Transportation Master Plan Transit Corridors

Adopted:

- City Council
- Planning Commission
- Transportation Commission



HOW DID WE GET HERE AND HOW ARE WE SETTING **DUKE STREET** ? *IN MOTION*



Previously Approved Planning Efforts

- 2012 Transportation Corridors Feasibility Study
 - Preferred alternative recommended by previous Advisory Group and adopted by City Council



Figure E.3: Alternative 1a (Curb Running in Mixed Flow and Dedicated Lanes)



Figure E.4: Alternative 3c (Curb Running in Dedicated Lanes with New Lanes)

Previously Approved Planning Efforts

- 2012 Transportation Corridors Feasibility Study

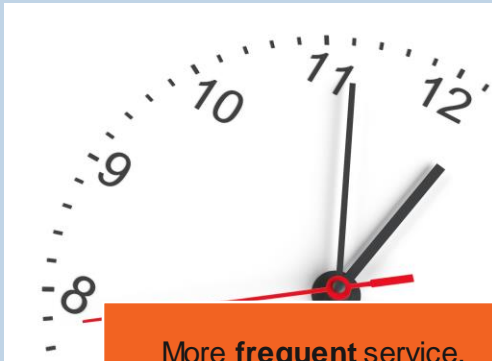
- Preferred alternative plans:

<https://media.alexandriava.gov/docs-archives/tes/info/supplemental=information=appendix=forscreen.pdf>



WHAT IS BUS RAPID TRANSIT (BRT)?

- An integrated, flexible system of facilities, equipment, services, and amenities that **improve the speed, reliability, and identity of bus transit**. May include:



More **frequent** service.

The Vine (Steve Morgan, Wikipedia)



Upgraded bus stops with enhanced passenger amenities.



Transit signal priority (TSP) to improve travel time.



NACTO

Queue jump lanes to allow BRT vehicles to bypass traffic.



GRTC Pulse (BeyondDC, Flickr)

Vehicles branded for easy recognition by riders.

I Street bus lane (BeyondDC, Flickr)



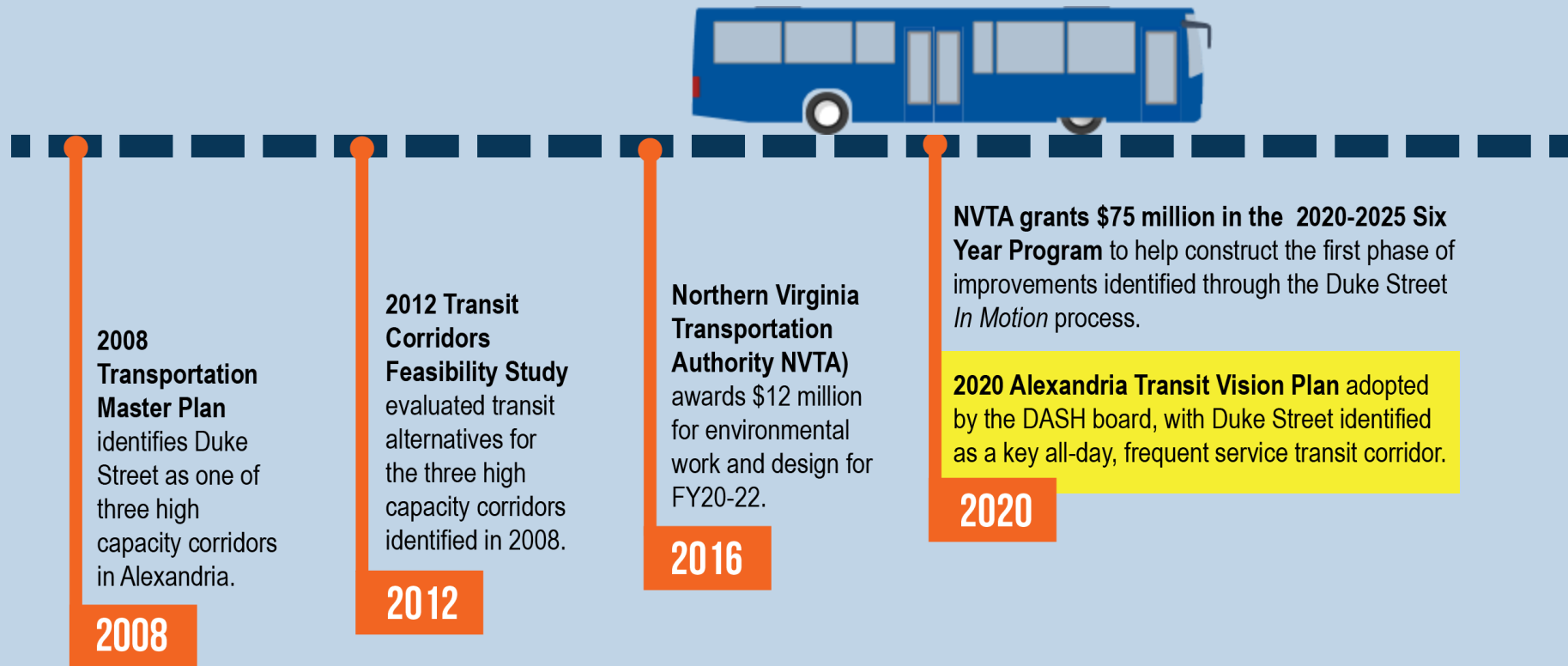
Partial to full time bus lanes.

Metroway (BeyondDC, Flickr)



Full separated bus lanes with rail-like service.

HOW DID WE GET HERE AND HOW ARE WE SETTING **DUKE STREET** ? *IN MOTION*



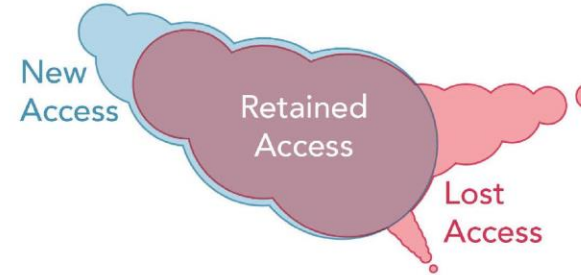
Graphic From
2020 Alexandria
Transit Vision Plan



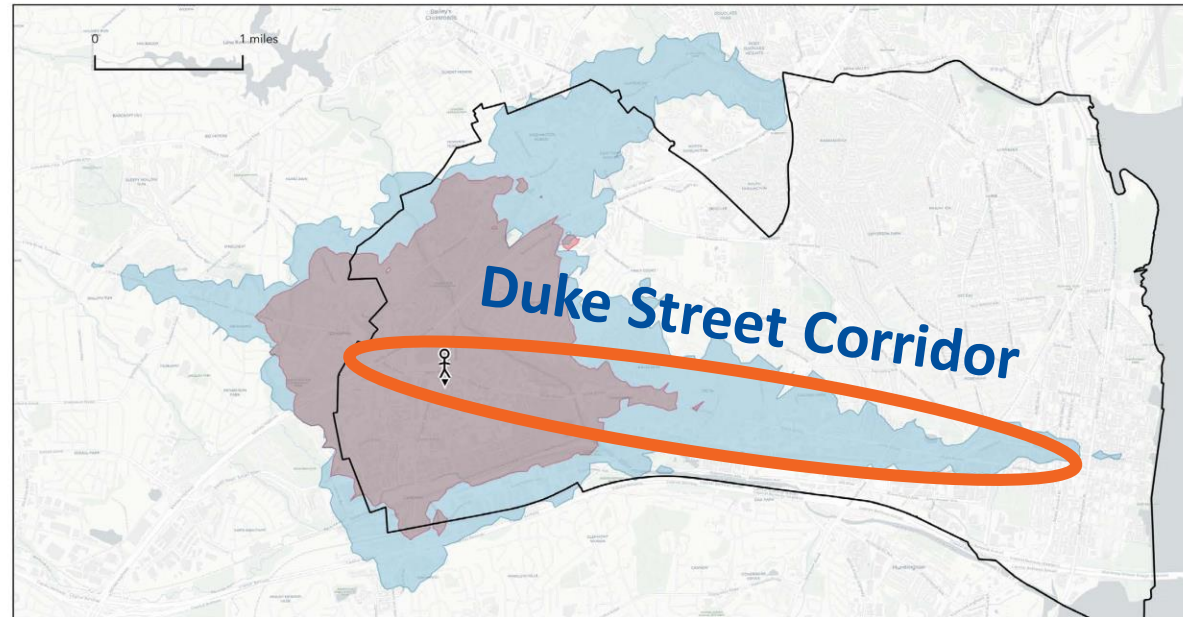
Figure 30: Example of Isochrone Maps and Diagram

How far can I travel from Landmark Mall in 30 minutes?

Riders can reach more jobs and opportunities in the 2030 Vision Plan Network than in the Existing network by walking and transit at noon on a weekday.



68% more residents and 205% more jobs accessible than existing network



2030 and 2022 Vision Plan Networks

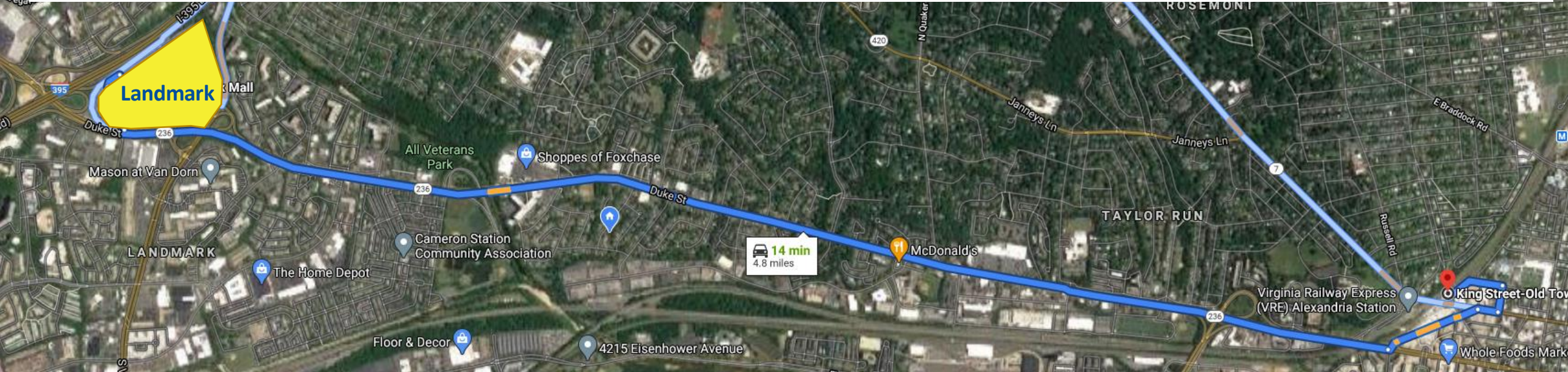
HOW DID WE GET HERE AND HOW ARE WE SETTING **DUKE STREET** *IN MOTION* ?

DUKE STREET
IN MOTION



Duke Street in Motion Corridor Study Area

Elements and Considerations



Project Scope Elements

- Corridor location: Landmark to King Street Metrorail via Duke Street
- Bus transit is primary component
- Bike, pedestrian, and vehicular elements may be addressed in relation to transit

Alternatives for Consideration

- Station locations and amenities
- Bus operator (DASH, WMATA, other)
- Dedicated transit lanes
- Role of service roads
- Bike lanes, trails, sidewalks, landscaping, utilities
- Signal improvements (TSP)
- Suggestions that come out of the Duke Street in Motion process

RELATED CITY PROJECTS AND INITIATIVES

RELATED CITY PROJECTS AND INITIATIVES

- West Taylor Run Parkway Intersection Improvement
- Smart Mobility:
 - Fiber Optic Traffic connection
 - Adaptive Traffic Signals and
 - Transit Signal Priority
- Duke Street Traffic Mitigation Pilot
- Landmark Mall Redevelopment
 - Landmark Mall Transit Center
- Witter Wheeler Feasibility and Campus Master Plan

WEST TAYLOR RUN PARKWAY INTERSECTION IMPROVEMENT



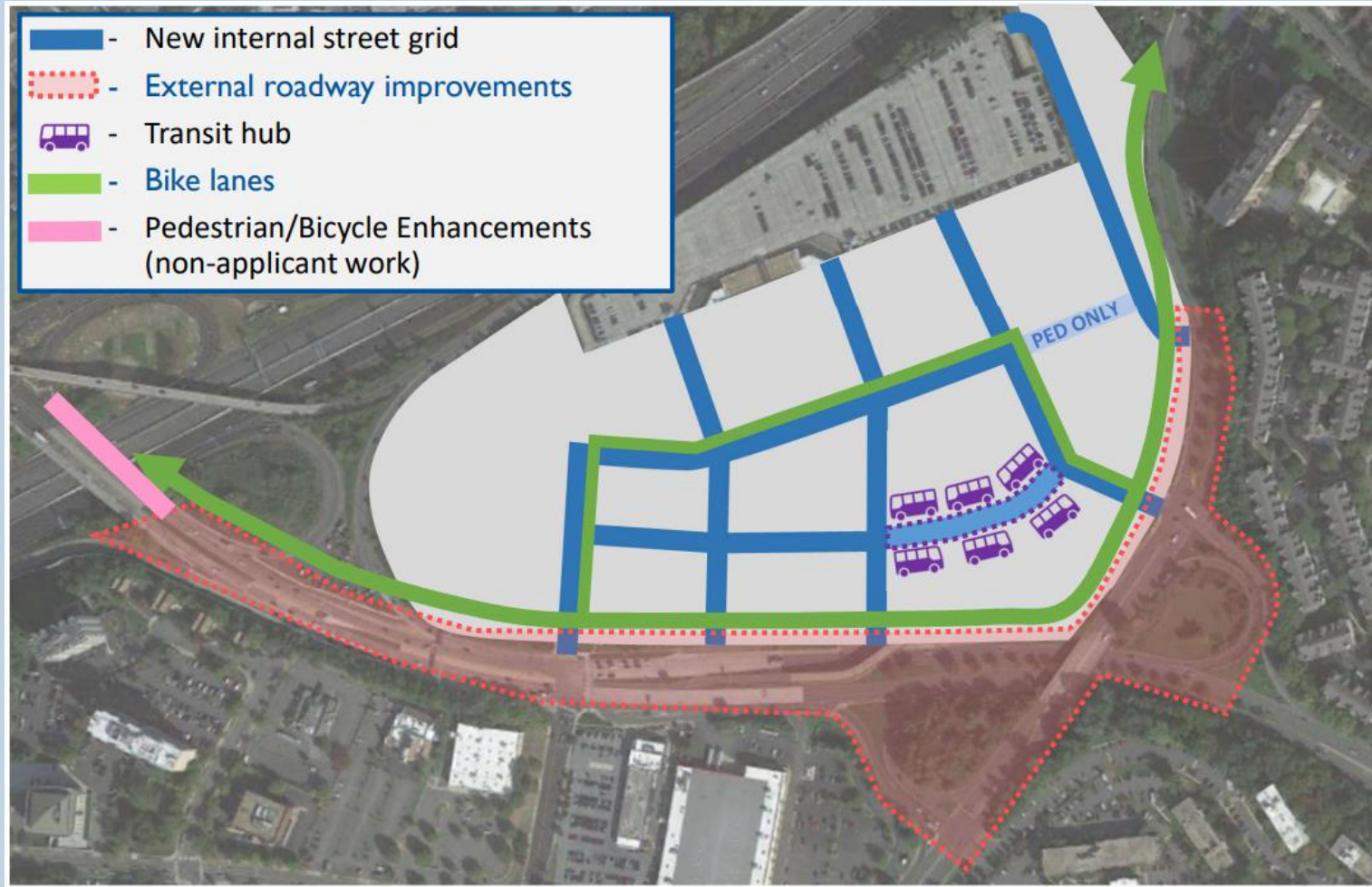
SMART MOBILITY PROJECTS



Using Technology to better manage our transportation systems

- Fiber Optic Traffic connection
- Adaptive Traffic Signals
- Transit Signal Priority
- StreetLight data

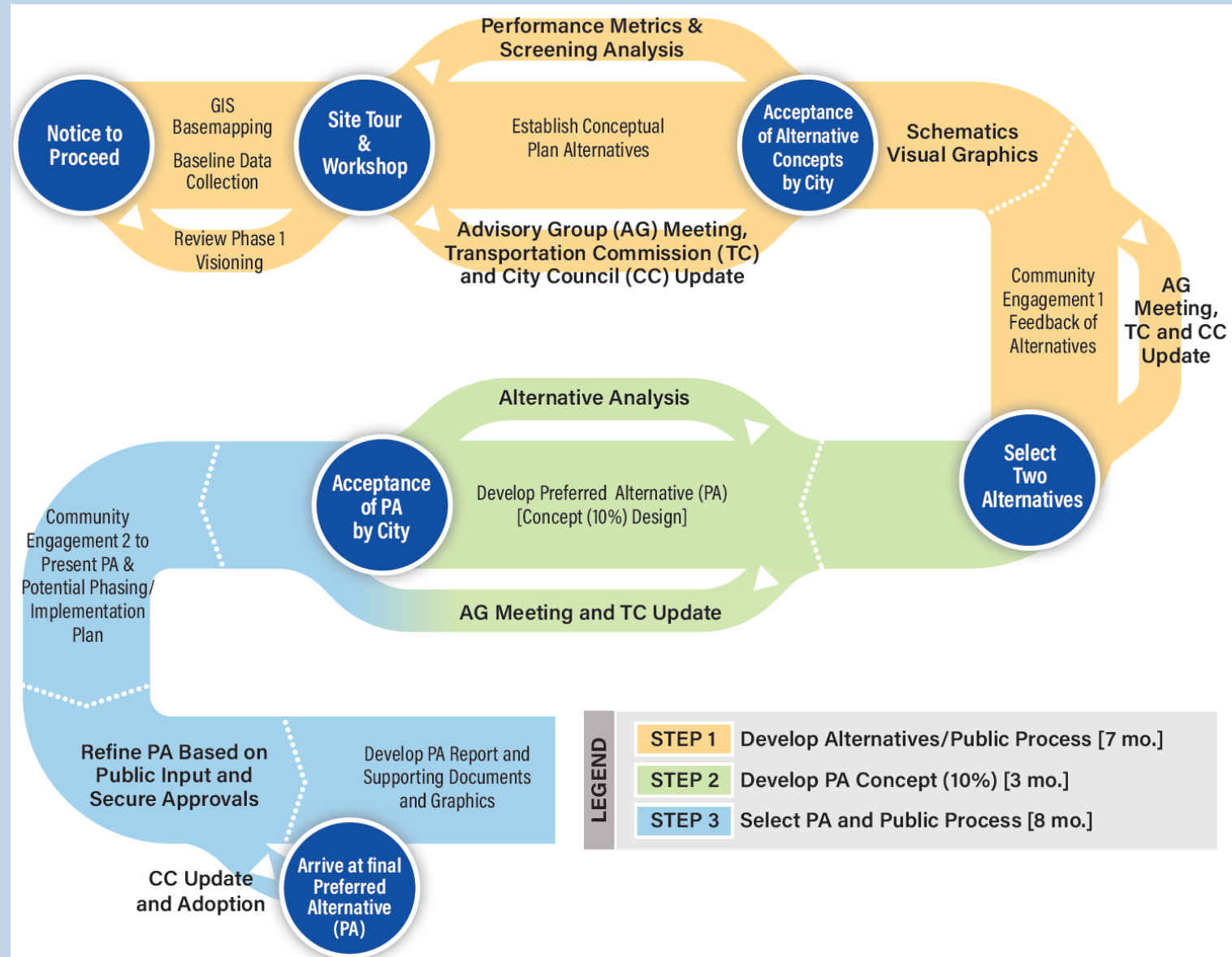
LANDMARK MALL REDEVELOPMENT PROPOSED SITE PLAN



PROJECT APPROACH

PROJECT PROCESS

- Scope
- Major milestones
- Deliverables



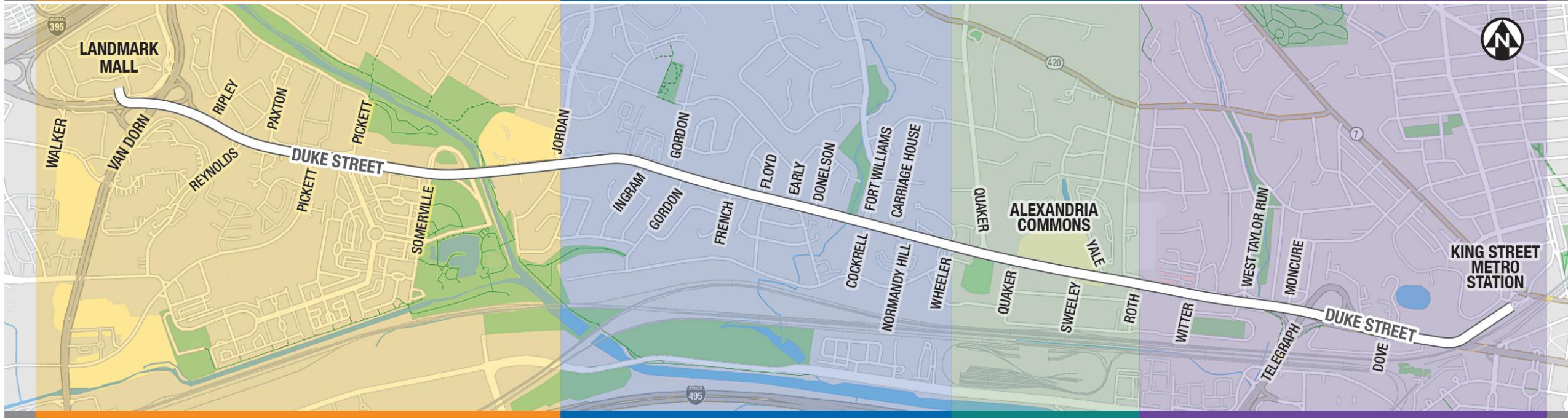
CORRIDOR SEGMENTS AND ISSUES

SEGMENT 1 - Landmark Mall to Jordan

SEGMENT 2A – Jordan to Wheeler

SEGMENT 2B Wheeler to Roth

SEGMENT 3 - Roth to King St Metro Station



- Higher density
- 6-lane section
- Frontage road for business

- Access to transit
- 4-lane section
- Frontage road for residential and business

- Transitional cross-section
- Business access
- Traffic operations

- Access to transit
- Regional traffic access
- Traffic operations

OUTREACH PLAN

- **Two rounds** of community engagement
 - #1: To obtain feedback of **alternatives**
 - #2: To present **preferred alternative** and phasing / implementation plan
- Advisory Group to provide initial review and comment prior to finalizing alternatives for public comment
- At least three alternatives per segment for first round of public comment



SPRING/SUMMER 2021 COMMUNITY ENGAGEMENT

WHAT IS “DUKE STREET *IN MOTION*”?

- **Duke Street *IN MOTION*** is a project focused on ensuring that transit improvements in the Duke Street corridor, from Landmark Mall to the King Street Metro Station, provide efficient transportation options that align with all users’ needs, wants, and expectations.

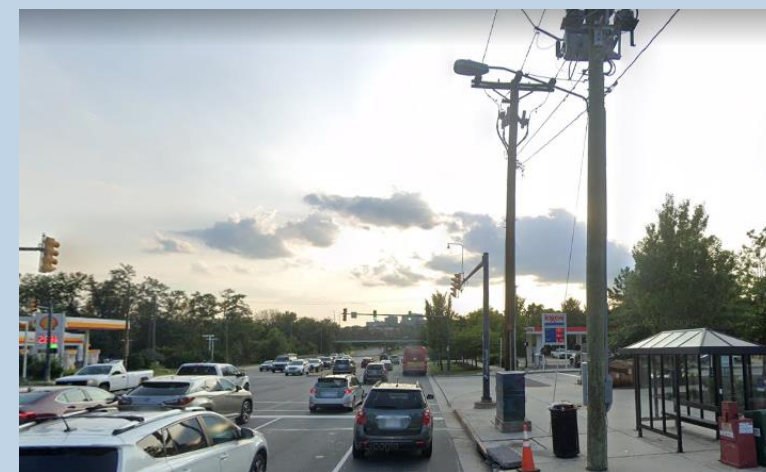


OVERVIEW OF ACTIVITIES

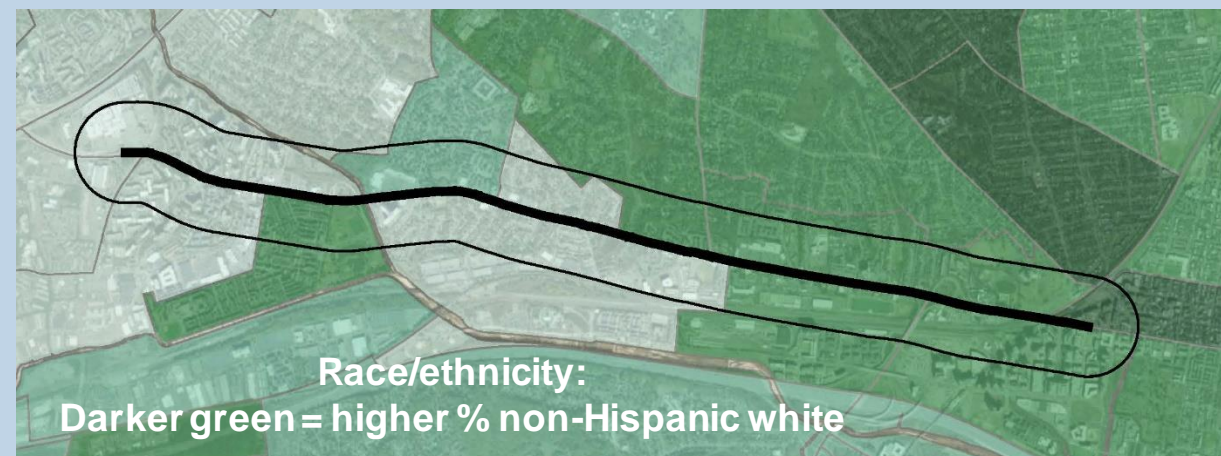
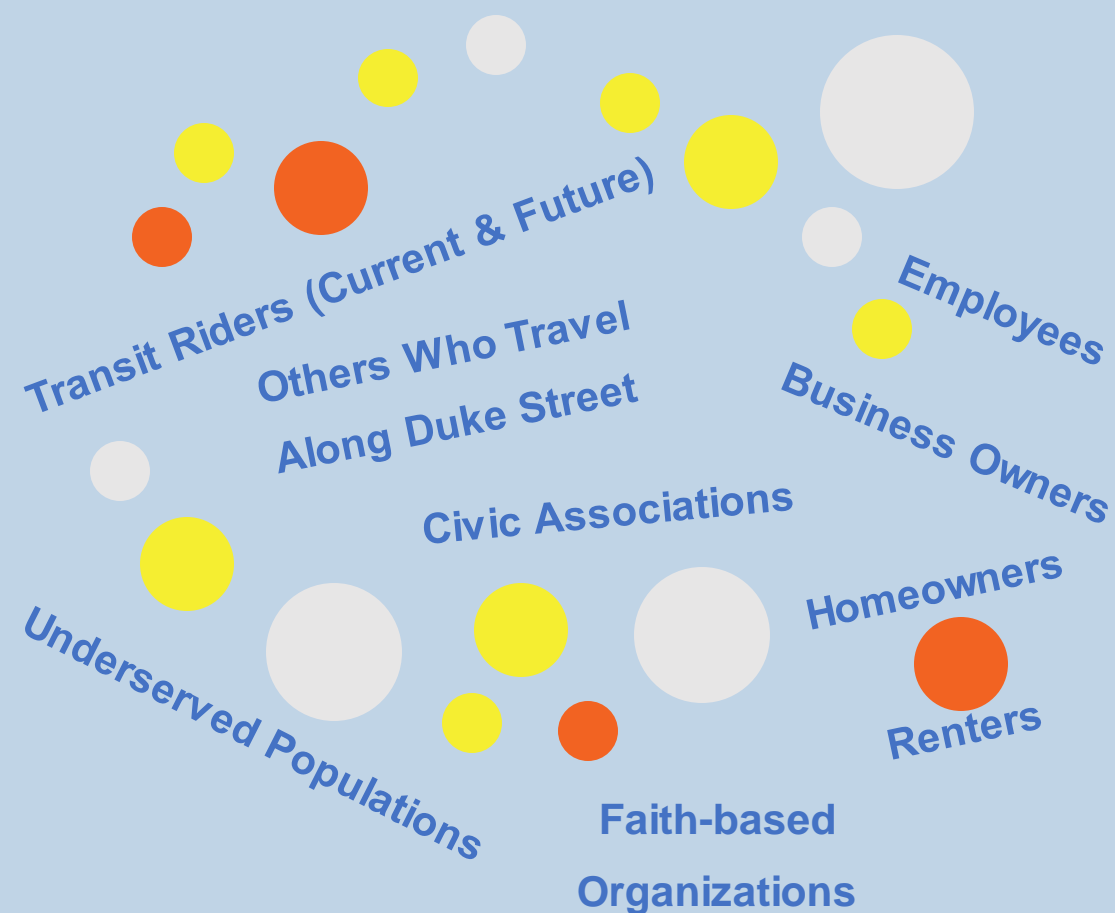
PHASE 1

Community Visioning

- A community vision statement and guiding principles describe a desired outcome for the future.
- These will be used to guide and evaluate the conceptual planning efforts.
- **Goal:** Corridor vision reflective of the needs of entire Duke Street community
- **Used a variety of outreach strategies**, emphasizing groups that aren't typically represented



THE DUKE STREET COMMUNITY



DUKE STREET *IN MOTION* WEEK AND RELATED EVENTS & ACTIVITIES

DUKE STREET
IN MOTION

- **Outreach** through social media, email, flyers, lawn signs, door hangers, etc.
- **Pop-up events & bus stop chats**
 - Bilingual street teams
 - Bus stop chats
 - Grocery stores
 - Public parks and library
 - Apartment / condo complexes
 - Laundromats
- **Web-based feedback form**
 - Feedback form and materials also in Spanish and Amharic.



MANY PEOPLE PARTICIPATED!

- 1,785 responses on the feedback form
- 3,587 project handouts distributed
- 6,393 received City T&ES eNews blast
- 95,889 reached on social media
- 22 community pop-up events
- 92 webinar attendees

Engagement Demographics

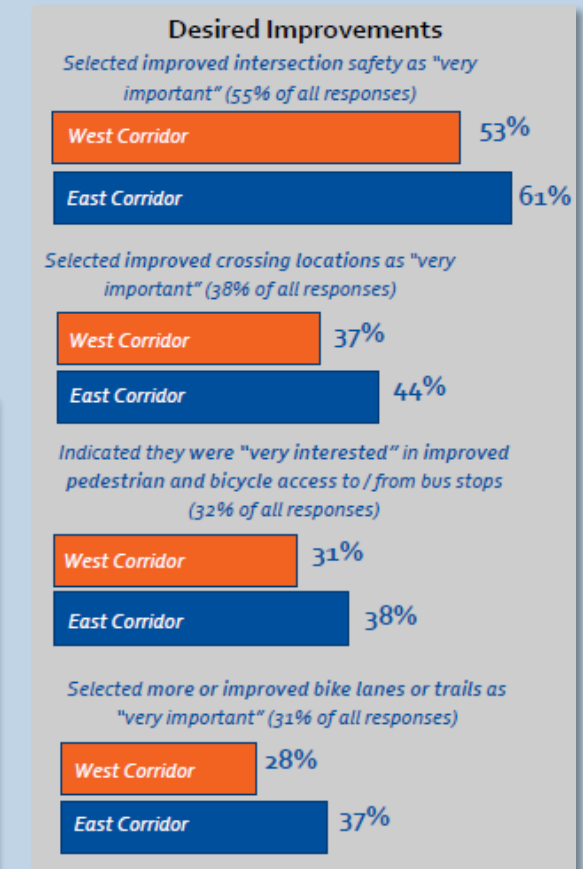
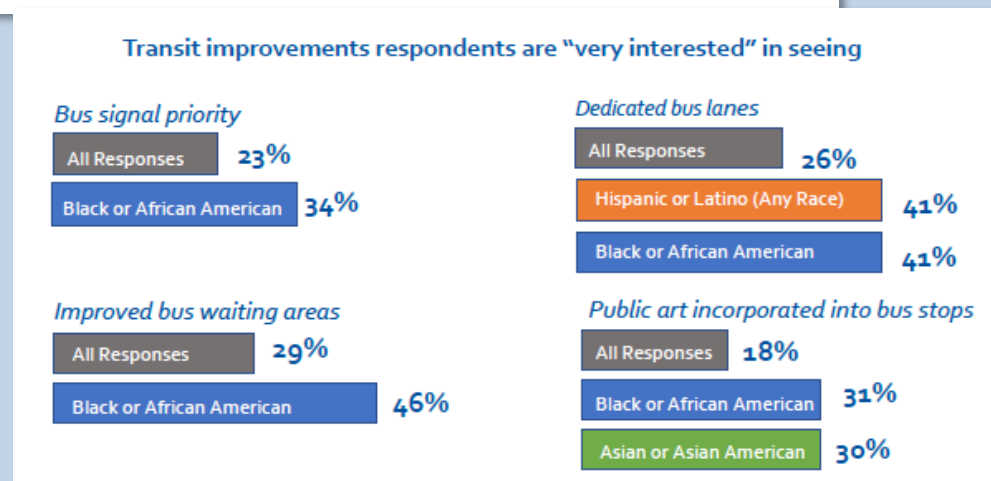
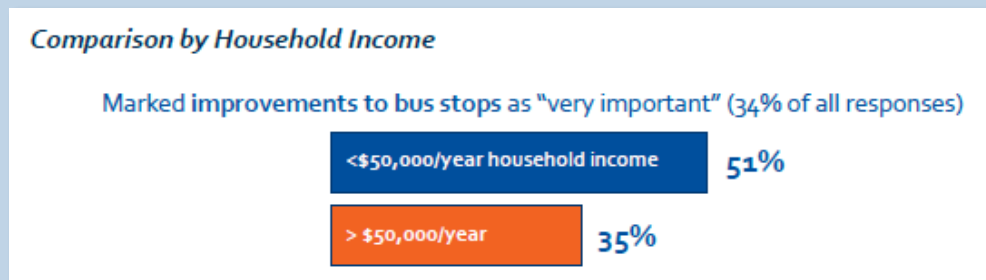
- **Pop-up events:** Most strategically located to reach & collect input from minority, low-income, marginalized non-English speaking community members.
- **Bus-stop chats:** 83% of participants at bus stop chats were minority members of the community (51% Hispanic, 29% Black, 3% Asian or other).
- **Feedback form:** Relative to the overall demographic composition of the corridor's population, feedback form responses had higher % of responses from affluent and white individuals, as well as from homeowners.



FINDINGS

FULL SUMMARY IS AVAILABLE

Visit the website to download the summary document:
alexandriava.gov/DukeInMotion



FINDINGS: BUS RIDING FREQUENCY

Many people would consider riding the bus more often if options were improved, safer, and more efficient.

- **47%** of all respondents said they would ride or would consider riding the bus more often if improved, safer, and more efficient options were provided.
- **72%** of respondents who currently ride the bus 1-5 times per month said the same.

FINDINGS: IMPROVEMENTS & AMENITIES

Most people are interested in seeing changes that would improve the bus riding experience.



	All Respondents	Current Bus Riders
<i>Access</i>	58% would like to see improved <u>pedestrian and bicycle access</u> to/from bus stops.	68% of current bus riders would like to see <u>improved pedestrian and bicycle access</u> to/from bus stops.
<i>Amenities</i>	68% said <u>bus stop improvements</u> were “very” or “somewhat” important.	78% said <u>bus stop improvements</u> were “very” or “somewhat” important.
<i>System</i>	51% of respondents are interested in <u>bus signal priority improvements</u> . 48% are interested in <u>dedicated bus lanes</u> .	62% of current bus riders are interested in <u>bus signal priority improvements</u> . 57% are interested in <u>dedicated bus lanes</u> .

FINDINGS: TRAVEL TIME & EFFICIENCY

Most are interested in traveling more efficiently.

- **88%** of all respondents AND current bus riders selected reduced traffic as an important priority for future improvements.
- Current bus riders selected “congestion” as a top challenge less often than the average survey respondent (57% vs. 64%).

Many would like to have more predictability in bus arrival times.

- **65%** of all respondents and **74%** of current bus riders would like to see real-time bus arrival information at bus stops.

VISION AND GUIDING PRINCIPLES

DRAFT

DRAFT FOR ADVISORY GROUP DISCUSSION AND ADOPTION

**Vision and Guiding Principles
for the Duke Street in Motion Alternatives Analysis**

Project Vision

Improve the bus riding experience for current and potential riders

Using the bus to travel along Duke Street will be an efficient and desirable travel option. With enhancements to the corridor, Duke Street will become a vibrant community connector for people riding the bus, walking, driving, or biking.

Through improvements to the overall transportation system, but specifically to the transit infrastructure and operations, choosing to ride the bus becomes a **more efficient** and **desirable option** for Duke Street travelers, maintaining and enhancing Duke Street's role as a vibrant community connector for residents and businesses. All travelers benefit from an improved bus system, which also supports more connectivity and efficiency for other travel modes along the corridor.

Guiding Principles

To achieve our Vision, we must consider the following Guiding Principles in the development of capital investments and operational alternatives for the corridor:

(Note: The Guiding Principles and related Objectives will be tied to measurable characteristics of the design alternatives.)

Convenient: Make bus travel more predictable, frequent, and comfortable.

- Objectives:
 - Increased bus frequency.
 - Presence of real-time arrival information at bus stations.
 - Improved transit reliability
 - Improved boarding/alighting and onboard experience.
 - Improved ease-of-use and understanding of bus system/service.
 - Improved bus station shelters and amenities.

Efficient: Improve mobility for all Duke Street travelers.

- Objectives:
 - Improved bus travel times and efficiency.
 - Improved bicycle and pedestrian access to bus stations.
 - Improved first and last mile travel options with additional shared mobility devices.
 - Improved digital convenience for fare collection and service information/updates.
 - Limited or no negative travel time impacts to non-transit vehicles.

- Improved signal operations for transit vehicles and general traffic on the Duke Street corridor.

Equitable: Use enhanced bus transit to support equitable access for a diversity of people and places.

- Objectives:
 - Bus stations located near to high ridership/high need communities.
 - Improved station and bus vehicle amenities that respond to community needs, including improved wi-fi service on buses.
 - Improved ADA access to stations and crosswalks.
 - More or improved sidewalks that serve the corridor and connect to stations.
 - More or improved bike lanes or trails.
 - Improved access to businesses and services that frequently serve transit dependent residents.

Safe: Ensure safety and accessibility for those connecting to and riding the bus, as well as other travelers.

- Objectives:
 - Additional pedestrian and bicycle crossing locations and improved crosswalk timings.
 - Improved corridor and intersection safety.
 - Reduced person-vehicle interaction/conflict locations (e.g., driveways, uncontrolled access).
 - Limited or no increase in cut-through traffic in neighborhoods.
 - Increased visibility of passengers at bus stations.

Vibrant: Create and enhance thriving and future corridor destinations that improve resident quality of life and boost the local economy.

- Objectives:
 - Siting of bus stations within walking distance to area attractions/services, as well as future development areas.
 - Improved access to jobs.
 - Improved access to retail and recreation.
 - Improved station amenities.
 - Improved Duke Street streetscapes.
 - Coordinated planning efforts with land use to complement transit-oriented development.

Sustainable: Contribute positively to the environment, now and in the future.

- Objectives:
 - Reduced vehicle emissions (including those related to the bus transit vehicle while traveling and idling).
 - Improved (or no negative impacts to) stormwater management.
 - Increased tree canopy volume.

SCHEDULE AND MILESTONES

PROPOSED PROJECT SCHEDULE

	2022									2023								
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Advisory Group (AG) Meeting and City Council (CC)/ Transportation Commission (TC) Meeting	AG1	AG2	CC/ TC3	AG3		AG4	AG5/ CC/ TC4					AG6/ TC5	CC			AG7	TC5	CC
STEP 1: Develop Alternatives/Public Process																		
Notice to Proceed	*																	
Baseline Data Collection																		
Review Phase 1 Visioning																		
Design Workshop	*																	
Establish Baseline Conditions																		
Establish Conceptual Alternatives																		
Acceptance of Alternative Concepts by T&ES for Soliciting Public Input				*														
Community Engagement (CE) 1					CE1													
STEP 2: Develop Preferred Alternative (PA)																		
Select Two Corridor Alternatives Based on Public and T&ES Input							*											
Survey Basemap/Utilities*																		
Perform VISSIM Analysis																		
Develop PA Concept (10%) Design																		
Acceptance of PA by T&ES											*							
STEP 3: Select PA and Public Process																		
Community Engagement (CE) 2 to Present PA and Potential Phasing/Implementation, and Receive Feedback												CE2						
Refine PA Based on Public Input																		
City to Secure Approvals																		
Arrive at final PA															*			
Develop PA Report																		

* Milestones

ADVISORY GROUP SCHEDULE AND MEETING GOALS

- APRIL 2022: Introduction, background, **Vision and Guiding Principles review and potential adoption**
- MAY 2022: **Review of 2012 adopted plan and / or additional alternatives, Vision and Guiding Principles adoption (if necessary)**, input on outreach plan
- JULY 2022: Initial review and comment on draft alternatives, **followed by 1st round of public input in August and September**
- SEPTEMBER 2022: Review of public input and final comments on alternatives
- OCTOBER 2022: **Endorsement of alternatives to move forward to TC/CC**
- FEBRUARY 2023: Review of elements for inclusion in preferred alternative, **followed by 2nd round of public input in March and April**
- JUNE 2023: **Final endorsement of preferred alternative**